CENSUS BULLETIN.

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WASHINGTON, D. C.

April 29, 1902.

AGRICULTURE.

FLORIDA.

Hon. WILLIAM R. MERRIAM,

Director of the Census.

Sir: I have the honor to transmit herewith, for publication in bulletin form, the statistics of agriculture in the state of Florida, taken in accordance with the provisions of section 7 of the act of March 3, 1899. This section requires that—

The schedules relating to agriculture shall comprehend the following topics: Name of occupant of each farm, color of occupant, tenure, acreage, value of farm and improvements, acreage of different products, quantity and value of products, and number and value of live stock. All questions as to quantity and value of crops shall relate to the year ending December thirty-first next preceding the enumeration.

A "farm," as defined by the Twelfth Census, includes all the land, under one management, used for raising crops and pasturing live stock, with the wood lots, swamps, meadows, etc., connected therewith. It also includes the house in which the farmer resides, and all other buildings used by him in connection with his farming operations.

The farms of Florida, June 1, 1900, numbered 40,814, and had a value of \$40,799,838. Of this amount \$9,976,822, or 24.5 per cent, represents the value of buildings, and \$30,823,016, or 75.5 per cent, the value of land and improvements other than buildings. On the same date the value of farm implements and machinery was \$1,963,210, and that of live stock was \$11,166,016. These values, added to that of farms, give \$58,929,064, the "total value of farm property."

The products derived from domestic animals, poultry, and bees, including animals sold or slaughtered on farms, are referred to in this bulletin as "animal products." The total value of all such products, together with the value of all

crops, is termed "total value of farm products." This value for 1899 was \$18,309,104, of which amount \$4,810,524, or 26.3 per cent, represents the value of animal products, and \$13,498,580, or 73.7 per cent, the value of crops, including forest products cut or produced on farms. The total value of farm products for 1899 exceeds that reported for 1889 by \$6,222,774, or 51.5 per cent. A large part of this apparent increase doubtless is due to a more detailed enumeration in 1900 than in 1890.

The "gross farm income" is obtained by deducting from the "total value of farm products" the value of the products fed to live stock on the farms of the producers. In 1899 the reported value of products fed was \$2,118,680, leaving \$16,190,474 as the gross farm income for that year. The percentage which this amount is of the "total value of farm property" is referred to in the text of the bulletin as the "percentage of gross income upon investment." For Florida in 1899 it was 30.0 per cent. As no reports of expenditures for taxes, interest, insurance, feed for stock, and similar items have been obtained by any census, no statement of net farm income can be given.

The statistics presented in this bulletin will be treated in greater detail in the final report on agriculture in the United States, which will be published about June 1, 1902. The present publication is designed to present a summarized advance statement for Florida.

Very respectfully,

L. G. Poroen.

Chief Statistician for Agriculture.

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AGRICULTURE IN FLORIDA.

GENERAL STATISTICS.

Florida has a total land surface of 54,240 square miles, or 34,713,600 acres, of which 4,363,891 acres, or 12.6 per cent, are included in farms.

The surface of the state is level, nowhere reaching an altitude of 500 feet except at a few places along the central rice of the peninsula. The lands of the state may, in general, be classified as hammock, high-pine, flatwood, and swamp. The hammock land is the most fertile, but is found only in small detached areas. The high-pine land is favored for horticulture, but requires heavy fertilization to insure good crops, while the flatwoods, as a rule, are suitable only for grazing purposes. The swamp land, though generally covered with valuable timber, has a very fertile, alluvial soil, and, when diked, is especially adapted to the production of rice and sugar.

In the last decade destructive frosts were a severe check to the development of agriculture in Florida, and account for the decrease since 1890 in total farm wealth shown in the tables.

NUMBER AND SIZE OF FARMS.

The following table gives, by decades since 1850, the number of farms, the total and average acreage, and the per cent of farm land improved.

TABLE 1.-FARMS AND FARM ACREAGE: 1850 TO 1900.

	Numban	NUI	Per cent			
YEAR.	AR. Number of farms. Total.		Improved.	Unim- proved.	Average.	of farm land im- proved.
1900 1890 1880 1870 1870 1860 1850	40, 814 84, 228 23, 488 10, 241 6, 568 4, 304	4, 363, 891 3, 674, 486 3, 297, 324 2, 373, 541 2, 920, 228 1, 595, 289	1,511,658 1,146,693 947,640 786,172 654,213 349,049	2, 852, 288 2, 528, 798 2, 349, 684 1, 687, 869 2, 266, 015 1, 246, 240	106. 9 107. 4 140. 7 231. 8 444. 6 370. 7	84. 6 81. 2 28. 7 81. 0 22. 4 21. 9

The number of farms in Florida has increased in every decade for the last fifty years, and so rapidly that in 1900 there were over nine times as many farms as there were in 1850 and 19.2 per cent more than there were in 1890. Except in the decade 1860 to 1870, the total acreage of farm land has also increased, but, on the whole, less rapidly than the number of farms, so that the average size of farms has decreased, being in 1900 less than one-fourth as great as in 1860. The area of improved farm land has increased in every decade since 1850, even in the decade 1860 to 1870 when the total farm acreage showed a decrease. This increase has been far more rapid in certain decades than in others, but in all decades except from 1870 to 1880, it has outstripped the increase in unimproved

land. Consequently the percentage of farm land improved has shown a considerable increase since 1850, constituting about one-third of the total farm acreage in 1900, as compared with about one-fifth in 1850.

FARM PROPERTY AND PRODUCTS.

Table 2 presents a summary of the principal statistics relating to farm property and products for each census year, beginning with 1850.

TABLE 2.—VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, AND OF FARM PRODUCTS: 1850 TO 1900.

YEAR.	Total value of farm ' property.	Land, improve- ments, and buildings.	Imple- ments and machinery.	Live stock.	Farm prod- ucts. ¹
1900 1890 1880 1870 2 1860 1850	\$53, 929, 064 81, 046, 200 26, 340, 481 15, 685, 451 22, 889, 752 9, 861, 962	\$40, 799, 838 72, 745, 180 20, 291, 835 9, 947, 920 16, 485, 727 6, 828, 109	\$1,968,210 1,158,040 689,666 505,074 900,669 658,795	\$11, 166, 016 7, 142, 980 5, 358, 980 5, 212, 157 5, 553, 356 2, 880, 058	\$18, 309, 104 12, 086, 830 7, 489, 892 8 8, 909, 746

¹ For year preceding that designated.

² Values for 1870 were reported in depreciated currency. To reduce to specie basis of other figures, they must be diminished one-fifth.

⁸ Includes betterments and additions to live stock.

The most significant features of the change in agricultural conditions reflected in the above table are the rapid development in the decade from 1850 to 1860; the disastrous effects of the Civil War, from which the state did not recover entirely until the decade 1880 to 1890; the remarkable progress shown for the decade 1880 to 1890; and the marked decrease in the value of land, improvements, and buildings in the last decade.

This decrease in the total value of farm property in the last decade is due entirely to a depreciation in the value of land, improvements, and buildings, resulting from the effects of the destructive frosts of 1894-95 upon the fruit-growing industry of the state. All other classes of farm property show a considerable increase in value. In the case of live stock the increase, 56.3 per cent, is simply another result of the causes just mentioned. Abandoned fruit lands were utilized for grazing purposes, with a consequent development of cattle raising, that contributed towards offsetting the losses in fruit production. A part of the increase of 69.5 per cent in the value of implements and machinery, and of 51.5 per cent in the value of products, is doubtless due to a more detailed enumeration in 1900 than in previous census years.

COUNTY STATISTICS.

Table 3 gives an exhibit of general agricultural statistics by counties.

TABLE 3.—NUMBER AND ACREAGE OF FARMS, AND VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, JUNE 1, 1900, WITH VALUE OF PRODUCTS OF 1899 NOT FED TO LIVE STOCK, AND EXPENDITURES IN 1899 FOR LABOR AND FERTILIZERS, BY COUNTIES.

	NUMBER O	F FARMS.	AORES II	Y FARMS.	Ψ.	ALUES OF FAR	M PROPERTY			EXPEND	TURES.
G OUNTIES.	Total.	With build- ings.	Total.	Improved.	Land and improve- ments (ex- cept build- ings).	Buildings.	Imple- ments and machinery.	Live stock.	Value of products not fed to live stock.	Labor.	Fertil- izers.
The State	40, 814	89, 265	4, 363, 891	1,511,658	\$3 0, 82 3, 01 6	\$9,976,822	\$ 1,963,210	\$11,166,016	\$ 16, 190, 474	\$1,468,290	\$ 758 , 1 20
Alachua	2, 958	2, 765	278, 675	101, 594	1,605,180	543, 810	154, 000	637, 574	1, 366, 890	88, 210	51, 640
Baker	396	395	36, 200	13, 886	214,420	88, 860	16, 600	116, 474	230, 213	20, 870	16, 900
Bradford	1, 291	1, 225	116, 836	89, 778	524,830	229, 230	41, 890	274, 375	504, 295	24, 150	27, 620
Breyard	615	572	38, 118	7, 290	1,649,170	483, 590	26, 440	160, 625	207, 942	69, 000	88, 290
Calhoun	815	312	49, 901	19, 566	138,500	82, 480	20, 030	110, 224	143, 098	4, 880	3, 540
Citrus		296	29, 078	7, 846	367, 210	180, 160	17, 570	105,770	187, 681	8, 460	970
Clay		892	48, 075	7, 178	159, 870	100, 380	17, 030	139,460	162, 921	4, 390	2, 290
Columbia		1,548	205, 557	94, 087	783, 370	816, 930	58, 520	342,817	663, 861	66, 750	16, 460
Dade		341	39, 231	4, 726	915, 570	172, 080	24, 590	29,198	801, 310	72, 510	50, 800
De Soto		686	59, 576	10, 203	2, 048, 680	210, 070	85, 440	794,485	475, 684	18, 060	23, 070
Duval		761	66, 795	9,609	1,051,830	324, 130	89, 260	226, 658	825, 789	29, 610	9, 040
Escambía		467	43, 456	7,977	261,350	204, 960	29, 030	133, 796	181, 140	10, 080	12, 860
Franklin		45	12, 389	2,585	17,010	12, 140	2, 440	34, 284	15, 496	860	190
Gadsden		1,526	212, 022	79,135	1,120,710	484, 910	250, 090	288, 145	749, 868	47, 620	41, 770
Hamilton		1,022	182, 781	74,026	672,560	197, 840	50, 760	252, 170	528, 622	40, 630	21, 190
Hernando		358 1,411 864 8,068 2,217	25, 453 103, 561 120, 291 824, 269 174, 142	8,040 22,346 29,414 144,871 101,570	156, 540 2, 590, 070 214, 050 846, 319 712, 185	94, 410 588, 970 117, 280 437, 851 209, 495	18, 070 75, 450 21, 670 122, 400 66, 580	98, 610 864, 748 150, 887 497, 872 290, 867	101, 689 667, 678 226, 630 963, 984 752, 728	5, 800 52, 950 5, 630 67, 890 42, 110	590 59, 840 10, 130 47, 000 8, 830
Lafayette	580	575	92, 031	25, 594	222, 010	94, 130	22, 380	288, 963	216, 761	7, 940	690
Lake	848	816	88, 099	22, 171	1, 181, 410	400, 610	45, 840	176, 259	227, 461	59, 110	14,550
Lee	238	224	24, 021	3, 387	799, 680	116, 560	23, 930	193, 859	296, 180	54, 140	17,400
Leou	2,428	2,400	207, 807	118, 930	1, 102, 067	852, 118	92, 840	371, 684	725, 485	58, 620	2,140
Levy	795	776	90, 457	28, 534	278, 330	124, 380	23, 670	287, 577	285, 621	19, 070	620
Liberty Madison Manatee Marion Monroe	170	170	50, 227	10, 098	58,510	38, 870	8, 810	60, 218	70, 156	4, 860	2, 020
	2, 100	2,055	226, 942	119, 885	857,985	258, 598	80, 260	842, 018	794, 068	72, 290	81, 370
	212	195	20, 846	4, 252	1,486,440	134, 420	17, 340	110, 811	260, 653	87, 560	30, 380
	2, 520	2,247	201, 472	72, 755	1,216,630	704, 230	112, 080	519, 851	947, 789	126, 610	81, 600
	118	118	12, 266	2, 129	181,950	48, 860	2, 530	9, 784	246, 343	19, 580	350
Nassau	361	353-	85, 815	7, 100	123, 700	74, 870	11, 630	113, 861	124,586	5, 710	2, 450
Orange	1, 218	1,050	85, 509	20, 790	2, 168, 880	659, 570	71, 580	362, 058	855,891	100, 480	80, 250
Osceola	354	247	55, 126	5, 251	428, 120	66, 180	11, 030	783, 030	229,068	4, 980	2, 710
Pasco	587	572	45, 271	18, 669	403, 700	181, 420	80, 540	214, 751	257,695	27, 430	8, 580
Polk	829	806	75, 184	17, 836	1, 019, 080	252, 800	40, 890	452, 676	292,282	20, 460	25, 000
Putnam St. John Santa Rosa Sunter Suwanee	799	778	69, 934	14, 466	437, 800	260, 910	36, 880	208, 104	228, 296	19, 300	6,750
	238	229	20, 869	8, 737	187, 970	84, 570	16, 480	105, 390	106, 122	12, 470	4,880
	348	841	51, 957	9, 285	152, 530	118, 840	17, 230	154, 977	188, 861	5, 100	7,950
	744	712	81, 294	20, 525	504, 350	152, 120	48, 390	251, 855	289, 748	29, 360	17,690
	1,679	1,656	220, 779	102, 836	593, 990	236, 080	62, 880	326, 302	610, 044	84, 180	16,200
Taylor Volusia Wakulia Walton Washington	528	528	83, 286	21, 913	188, 560	63, 710	13, 900	158, 568	188, 267	6, 510	8, 580
	430	421	46, 758	10, 741	619, 790	316, 640	32, 330	220, 568	178, 869	49, 100	9, 290
	875	873	72, 985	22, 710	105, 490	54, 890	16, 020	102, 669	112, 723	4, 420	820
	649	641	95, 839	18, 502	256, 210	114, 430	22, 120	180, 946	206, 964	6, 670	8, 660
	808	755	93, 818	29, 340	229, 590	109, 520	28, 330	181, 918	208, 757	8, 570	8, 740

The number of farms in the state, June 1, 1900, was 6,586 greater than in 1890, the largest relative gains being shown for Monroe, Osceola, Liberty, Lee, and De Soto counties, where the rates of increase were 1,211.1 per cent, 359.7 per cent, 314.6 per cent, 296.7 per cent, and 295.8 per cent, respectively. The percentages of decrease for the counties which report fewer farms than in 1890 are as follows: Volusia, 61.8; St. John, 53.3; Orange, 42.0; Lake, 37.7; Pasco, 31.8; Sumter, 30.0; Putnam, 28.7; Santa Rosa, 12.9; and Polk, 11.5. All of these counties, except Santa Rosa and five others in the central part of the state, show decreases in total farm acreage. The counties showing increases of over 100 per cent are: Monroe, Osceola, Calhoun, Franklin, Walton, Liberty, Taylor, De Soto, Lee, and Brevard. Liberty, Dade, Calhoun, Monroe, and Franklin counties report improved acreages in 1900 from four to twelve times as great as they had in 1890.

The value of farms increased in the southern and western parts of the state, but decreased in most of the central counties. Decreases in the value of land and buildings are shown in all counties of the northern half of the peninsula, the losses being greatest in those counties which suffered most severely from the frosts of 1894, 1895, and 1899.

All counties except Lafayette, Lake, Levy, Orange, Putnam, and Volusia reported a greater value for implements and machinery in 1900 than in 1890. In 1900 the average value per farm was \$48.10, and in 1890 it was \$33.88. The highest average value was reported by Gadsden county, \$162.50, and the lowest by Monroe county, \$21.44.

The total value of live stock has increased 56.3 per cent, Manatee, Santa Rosa, St. John, and Volusia being the only counties in which decreases are reported. The largest gains are shown for Osceola, De Soto, and Alachua counties.

The average expenditure per farm for labor, including value of board furnished, varied from \$10 in Walton county, to \$227 in Lee county, and for the state it was \$36. For fertilizers, the average expenditure per farm

was \$18 in 1899, and \$25 in 1889. Levy county expended an average of only \$0.78 per farm. The highest average, \$143, was for Manatee county.

INCREASE IN THE NUMBER OF FARMERS IN FLORIDA.

In this bulletin those individuals who, as owners, salaried managers, or tenants, operate farms with or without the assistance of members of their household or of hired laborers, are designated as "farmers." All those working on farms for wages are spoken of as "farm laborers." The number of farmers at any given time corresponds closely to the number of farms.

For every ten years, excepting from 1850 to 1860, and from 1890 to 1900, in which latter decade the agricultural development was temporarily checked by the frosts which so seriously damaged the orchards of the state, the rate of gain in the number of farms, and consequently in the number of farmers, has exceeded that in population. Taking the period since 1850 as a whole, the population of Florida has increased from 87,445 to 528,542, or a little more than sixfold, while the number of farms has advanced from 4,304 to 40,814, an increase of almost tenfold.

These facts, and those contained in Tables 4, 4a, and 5, which follow, to be seen in their true relation to the social and economic conditions and changes on Florida farms, must be studied in connection with the occupation tables of the censuses. Those tables are available for 1880 and 1890, but not as yet for 1900. In 1880 the total number of males engaged in agriculture was 47,465, while in 1890 it was 53,558. In 1880, 22,279 of the total number were farm laborers, working for wages, and 1,748 worked for wages at special occupations, such as gardening, fruit growing, etc. In 1890 the number of farm laborers was but 16,783, and the number working at special occupations, 2,547.

These figures show that in 1880 there were on each 1,000 farms in Florida 2,025 males employed in some capacity. Of this number approximately 691 operated farms as owners and 309 as tenants, while 1,025 worked for wages. Ten years later, for each 1,000 farms, 1,565 males were employed, of whom 764 operated farms as owners and 236 as tenants, while 565 worked for wages.

As showing the relative changes in these three classes of farming population, the following comparative statement is presented: For every 1,000 males engaged in agriculture in 1880 there were approximately 341 who operated farms as owners; 153, as tenants; and 506 who worked for wages. In 1890 there were 488 owners, 151 tenants, and 361 wage laborers. It is seen that farm owners and wage laborers practically changed places in relative importance between the two census periods, while the tenant class remained about stationary as compared with the total farming population. As the Eleventh Census, however, in its statistics of farms and homes reported more farm-tenant families than the agricultural division of that census reported tenant-operated farms, it is possible that more exact figures would show a slight

increase in the relative number of tenants compared with the total number of males engaged in agriculture in the decade from 1880 to 1890, instead of the decrease given above.

During the decade under consideration the number of males engaged in agriculture increased 12.8 per cent. It may safely be assumed that the total agricultural population increased in about the same proportion. The number of farm owners in the meantime increased 61.4 per cent, the number of tenants 11.7 per cent, while the number of farm laborers decreased 24.7 per cent.

The changes that took place in the relative numbers of these three classes indicate a distinct elevation in the general social and economic level of the total farming population. Whether caused by the rise of the farm wage laborer to farm ownership, as appears probable from the figures reviewed, or by additions to the classes of owners and tenants from other occupations, or through immigration, this elevation is a beneficent change in all its aspects.

The occupation tables for 1900 are not yet prepared, but if the changes in rural population are reliable indices of the changes in the farming population proper, the movements in the decade from 1880 to 1890 were continued with but slight modifications in the last decade; and the average status of the people toiling on Florida farms has been raised even more than is shown by the foregoing comparisons for the preceding decade.

FARM TENURE.

In connection with the changes noted above, attention is called to the specific changes in farm tenure shown in Tables 4, 4a, and 5. Table 4 gives a comparative exhibit of the number of farms operated by owners, cash tenants, and share tenants, for 1880, 1890, and 1900. Table 4a presents, for the two decades covered by Table 4, the per cent of increase in rural population, in the total number of farms, and in the number of farms of specified tenures. In Table 5 the tenure of farms for 1900 is given by race of farmer, and the farms operated by owners are subdivided into groups designated as farms operated by "owners," "part owners," "owners and tenants," and "managers." These groups comprise respectively: (1) Farms operated by individuals who own all the land they cultivate; (2) farms operated by individuals who own a part of the land and rent the remainder from others; (3) farms operated under the joint direction and by the united labor of two or more individuals, one owning the farm or a part of it, and the other, or others, owning no part, but receiving for supervision or labor a share of the products; and (4) farms operated by individuals who receive for their supervision and other services a fixed salary from the owners.

The farms operated by tenants are divided into groups designated as farms operated by "cash tenants" and "share tenants." These groups comprise, respectively:

(1) Farms operated by individuals who pay a cash rental or a stated amount of labor or farm produce; (2) farms operated by individuals who pay as rental a share of the products.

Table 4.—NUMBER AND PER CENT OF FARMS OF SPECI-FIED TENURES: 1880 TO 1900.

YEAR.	Total number of farms.		OF FARMS	OPERA-	PER CENT OF FARMS OPERA-			
		Owners,1	Cash tenants.	Share tenants.	Owners,1	Cash tenants,	Share tenan ts .	
1900 1890 1580	40, 814 84, 228 23, 438	29, 904 26, 140 16, 198	7, 889 3, 936 3, 548	2, 931 4, 152 8, 692	73, 5 76, 4 69, 1	19. 8 11. 5 15. 1	7. 2 12. 1 15. 8	

¹ Including "part owners," "owners and tenants," and "managers,"

TABLE 4a.—PER CENT OF INCREASE IN RURAL POPULATION, IN THE TOTAL NUMBER OF FARMS, AND IN THE NUMBER OF FARMS OF SPECIFIED TENURES, FOR THE DECADES, 1880 TO 1890 AND 1890 TO 1900, AND FOR THE TWENTY-YEAR PERIOD, 1880 TO 1900.

Puriods.	PER CENT OF INCREASE IN-								
	Rural popu- lation.	Total number of farms,	Number of farms operated by—						
			All owners.	All tenants.	Cash tenants.	Share tenants.			
1890-1900 1880-1890 1880-1900	29.8 34.1 74.0	19.2 46.0 74.1	14.7 61.4 85.2	38. 8 11. 7 49. 4	100, 4 10, 9 122, 4	1 29.4 12.5 1 20.6			

¹ Decrease.

TABLE 5.—NUMBER AND PER CENT OF FARMS OF SPECIFIED TENURES, JUNE 1, 1900, CLASSIFIED BY RACE OF FARMER.

PART 1.-NUMBER OF FARMS OF SPECIFIED TENURES.

RACE.	Total number of farms.	Owners.	Part owners.	Owners and tenants.	Man- agers.	Cash tenants.	Share tenants.			
The State	40, 814	26, 423	2, 281	280	1,010	7,889	2, 931			
WhiteColored 1	27, 288 13, 526	20, 816 5, 607	1, 480 851	186 94	917 98	2,392 5,497	1, 547 1, 384			
PART 2.—PER CENT OF FARMS OF SPECIFIED TENURES.										

PART 2.—PER CENT OF FARMS OF SPECIFIED TENURES.										
The State	100.0	64.7	5. 6	0.7	2.5	19.8	7.2			
WhiteColored 1	100.0 100.0	76.8 41.5	5, 2 6, 3	0.7 0.7	8. 3 0. 7	8.8 40.6	5.7 10.2			

¹ Including 5 Indians,

Of the farms of the state, 66.9 per cent are operated by white farmers and 33.1 per cent by colored farmers. Of the white farmers, 82.2 per cent own a part or all of the farms they operate, and 17.8 per cent operate farms owned by others. For colored farmers, the corresponding percentages are 48.5 and 51.5.

The relative number of farms rented for cash or for a share of the products is determined largely by local conditions. In counties where diversified farming or stock raising prevails, and where most of the farmers are white, share tenants outnumber cash tenants, but in the leading cotton-growing counties, where colored farmers are the

more numerous, the greater number of tenants pay a cash rental. In these latter counties, however, it is difficult to draw the distinguishing line very closely between the two forms of tenancy, since the contract is commonly of such a character as to make the lessee in part a share tenant, and in part a cash tenant. In Florida, as in other southern states, the greater number of these cases of indeterminate tenure were reported as share tenants.

No previous census has reported the number of farms operated by "part owners," "owners and tenants," or "managers," but it is believed that the number of farms conducted by the last-named class is constantly increasing.

PROGRESS OF COLORED FARMERS.

In 1850 the number of colored farmers in Florida was practically a negligible quantity. In 1900 it was 13,526, indicating the rise of substantially that number from the status of slaves or wage laborers to that of farmers.

The Eleventh Census, in its report on "Farms and Homes," gives valuable statistics relating to the number of colored farmers owning and renting farms, the only statistics of the kind which can be used, in connection with Table 5, to throw light upon the changes in the last decade in the average status of negro farmers. Those statistics are not, however, strictly comparable with the statisties of farm tenure collected by the division of agriculture. After making due allowance for variations, a careful comparison indicates that in the last decade the number of colored owners and tenants increased faster than the total negro farming population. The average status of the colored farming population of Florida has been materially advanced since emancipation, and the statistics at present available indicate more rapid progress since 1890 than in any preceding decade.

FARMS CLASSIFIED BY RACE OF FARMER AND BY TENURE.

Tables 6 and 7 present the principal statistics for farms classified by race of farmer and by tenure.

TABLE 6.—NUMBER AND ACREAGE OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY RACE OF FARMER AND BY TENURE, WITH PERCENTAGES.

RACE OF FARMER,	Num-	NUMBE	R OF ACRES	VALUE OF FARM PROPERTY.		
AND TENURE.	ber of farms.	Average.	Total.	Per cent.	Total.	Per cent.
The State	40, 814	106, 9	4, 363, 891	100.0	\$ 53, 929, 064	100.0
White farmers	27, 288 13, 526	133.6 53.0	8, 646, 691 717, 200	88, 6 16, 4	47, 457, 291 6, 471, 778	88.0 12.0
Owners Part owners Owners and tenants Managers Cash tenants Share tenants	26, 423 2, 281 280 1, 010 7, 889 2, 981	121. 8 116. 4 112. 4 206. 6 55. 7 68. 7	3, 217, 923 265, 569 31, 458 208, 680 439, 042 201, 219	78.7 6.1 0.7 4.8 10.1 4.6	88, 187, 000 2, 821, 117 839, 151 5, 926, 081 4, 775, 118 1, 980, 697	70.7 5.2 0.6 11.0 8.9 8.6

1 Including 5 Indians.

TABLE 7.—AVERAGE VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, AND AVERAGE GROSS INCOME PER FARM, WITH PER CENT OF GROSS INCOME ON TOTAL INVESTMENT IN FARM PROPERTY, CLASSIFIED BY RACE OF FARMER AND BY TENURE.

	AVI	AVERAGE VALUES PER FARM OF-							
	Farm	property		of gross income					
RACU OF FARMER, AND TENURE,	Land and im- prove- ments (except build- ings).	Build- ings.	Imple- ments and ma- chinery.	Live stock.	Gross income (products of 1899 not fed to live stock).	on total			
The State	\$75 5	8 244	\$4 8	\$ 27 4	\$ 397	80.0			
White farmersColored farmers I	994 278	324 84	61 22	860 99	476 236	27. 4 49. 8			
Owners Part owners Owners and tenants Managers Cash tenants Share tenants	782 783 699 4,199 371 887	270 242 261 1,129 95 111	49 49 41 271 26 22	842 213 210 268 113 139	440 418 412 637 256 288	30.5 83.8 84.0 10.9 42.8 42.9			

1 Including 5 Indians.

Approximately one-third of the farms of the state, comprising about one-sixth of the total farm acreage, are operated by colored farmers. The value of their farm property, however, constitutes less than one-eighth of the value of all farm property in the state. This is, of course, due in part to the fact that the holdings of colored farmers are small, the average size of their farms being but 53.0 acres as compared with 133.6 acres for white farmers. The average value per acre of their farm property, June 1, 1900, was but \$9, while for white farmers it was \$13. The average values per farm of their land, buildings, implements and machinery, and live stock, also, are relatively low. On the other hand, it appears from Table 7 that they obtained in 1899 a higher per cent of gross income on their investment in farm property than did white farmers.

This apparent anomaly is traceable, in general, to certain distinguishing racial characteristics, and, in particular, to the peculiarities of the contract system under which nearly all colored tenants lease their lands. The first point relates to the recognized tendency on the part of the more progressive white farmer to constantly improve his property, especially his buildings and fences, thus adding to its market value, although not materially increasing its producing capacity per acre. The colored farmer, on the other hand, adds comparatively little to his fixed capital in the way of improvements and his income per acre naturally represents a higher percentage of the capital invested than in the case of the white farmer. In addition, under the prevailing contract system, the white landlord commonly owns the greater portion of the working animals and most of the implements and machinery used by his colored tenants. These being kept for the most part on the farm where the landlord resides, were reported as part of his property, while the products obtained through their use were reported under the names of the tenants.

The farms conducted by cash tenants have the smallest

average area, 55.7 acres, and those under managers, the largest, 206.6 acres. Farms of managers have the highest average value, but on account of the high valuation of their land and buildings and the fact that not all of these farms are cultivated primarily for profit, the percentage of income on investment is lower than for any other group.

Of the 5 Indian farmers, 1 was an owner, 2 were managers, and 2 were tenants. The value of their property was \$5,286, and of their products, \$1,329.

Of the 278 farms, each containing 1,000 acres or over, 200 are operated by owners, 38 by managers, 16 by part owners, 15 by cash tenants, 8 by share tenants, and 1 by an owner and tenant.

FARMS CLASSIFIED BY AREA.

Tables 8 and 9 present the principal statistics for farms classified by area.

TABLE 8.—NUMBER AND ACREAGE OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY AREA, WITH PERCENTAGES.

1571	Num-	NUMBE	R OF ACRES	VALUE OF FARM PROPERTY.		
AREA.	ber of farms.	Average.	Total.	Per cent.	Total.	Per cent.
The State	40,814	106.9	4, 868, 891	100,0	\$53,929,064	100.0
Under 3 acres	584 2, 292 3, 488 18, 646 7, 874 7, 940 2, 259 1, 844 609 278	1.6 6.0 13.2 34.2 73.9 141.2 209.8 338.7 669.4 2,261.9	908 13, 783 46, 008 467, 062 581, 503 1, 120, 791 472, 792 624, 554 407, 684 628, 806	(1) 0.3 1.1 10.7 18.3 25.7 10.8 14.3 9.4	809, 310 1, 717, 062 2, 845, 919 10, 116, 941 9, 030, 653 11, 178, 228 4, 856, 002 6, 370, 337 3, 247, 954 8, 756, 658	1.5 3.2 5.3 18.8 16.7 20.7 9.0 11.8 6.0 7.0

1 Less than one-tenth of 1 per cent.

TABLE 9.—AVERAGE VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, AND AVERAGE GROSS INCOME PER FARM, WITH PER CENT OF GROSS INCOME ON TOTAL INVESTMENT IN FARM PROPERTY, CLASSIFIED BY AREA.

	AYR	AVERAGE VALUES PER FARM OF-							
	Farm	property		Per cent of gross income					
AREA.	Land and im- prove- ments (except build- ings).	Build- ings.	Imple- ments and ma- chinery.	Live stock.	Gross income (products of 1899 not fed to live stock).	on total			
The State	8 756	\$ 244	\$4 8	\$274	\$ 397	30.0			
Under 8 acres	828 420 469 409 645 812 1,188 2,194 8,181 8,285	289 218 208 207 245 898 586 887 2,484	18 23 28 27 40 47 71 106 198 975	801 88 116 161 255 304 498 619 1,117 1,869	387 194 225 274 379 460 688 814 1,135 2,714	27.9 25.9 27.5 37.0 83.0 32.7 29.7 23.6 21.3 19.3			

The greatest number of farms are in the group containing from 20 to 49 acres each, but the farms containing from 100 to 174 acres each comprise the largest percentage of the total acreage.

The relatively high values of land and buildings for the first three groups are due to the fact that they include most of the city dairies and florists' establishments and many fruit farms under highly intensive cultivation. The high average value of live stock on farms of the first group is due to the fact that among them are some farms the operators of which use large ranges on the public domain, but actually own or rent less than 3 acres of land.

The average gross incomes per acre for the various groups are as follows: Farms under 3 acres, \$248.74; 3 to 9 acres, \$32.29; 10 to 19 acres, \$17.02; 20 to 49 acres, \$8.01; 50 to 99 acres, \$5.13; 100 to 174 acres, \$3.26; 175 to 259 acres, \$3.05; 260 to 499 acres, \$2.40; 500 to 990 acres, \$1.70; 1,000 acres and over, \$1.16. In considering the high gross income per acre for farms of less than 3 acres, it should be borne in mind that the incomes of florists' establishments, nurseries, and city dairies, of which this group is largely composed, are determined not so much by the acreage of land used as by the amount of capital invested in buildings, implements, and live stock, and by the amounts expended for labor and fertilizers.

FARMS CLASSIFIED BY PRINCIPAL SOURCE OF INCOME.

In Tables 10 and 11 the farms are classified by principal source of income. If the value of the hay and grain raised on any farm exceeds that of any other crop and constitutes at least 40 per cent of the total value of products not fed to live stock, the farm is classified as a "hay and grain" farm. If vegetables are the leading crop, constituting 40 per cent of the value of the products, it is a "vegetable" farm. The farms of the other groups are classified in accordance with the same general principle. "Miscellaneous" farms are those whose operators do not derive 40 per cent of their income from any one class of farm products. Farms with no income in 1899 are classified according to the agricultural operations upon other farms in the same locality.

TABLE 10.—NUMBER AND AOREAGE OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY PRINCIPAL SOURCE OF INCOME, WITH PERCENTAGES.

PRINCIPAL SOURCE	Num- ber of	EMUK	ER OF ACRES	VALUE OF FARM PROPERTY.		
OF INCOME.	farms.	Average.	Total,	Per cens.	Total.	Per cent,
The State	40,814	106.9	4, 363, 891	100.0	\$58, 929, 064	100.0
Hay and grain Vegetables Fruits Live stock Dairy produce Tobacco Cotton Rice Sugar Flowers and plants Musery products Miscellaneous	2,760 5,150 1,853 171 9,191 65 66	111.1 79.1 85.2 131.9 98.8 261.8 91.3 147.9 89.5 12.1 76.9	191, 256 365, 117 285, 120 679, 428 183, 046 44, 680 889, 205 9, 615 6, 906 182 2, 307 1, 808, 084	4.4 8.4 5.4 15.6 4.2 1.0 19.2 0.1 (1) 0.1 41.4	1, 560, 260 6, 529, 684 11, 503, 694 9, 013, 889 2, 889, 560 1, 001, 300 6, 756, 996 68, 986 100, 766 55, 362 246, 020 15, 142, 545	2.9 12.2 21.8 16.7 5.4 1.8 10.7 0.1 0.2 0.1 0.5 28.1
	1.0	H :			1	

Less than one-tenth of 1 per cent.

TABLE 11.—AVERAGE VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, AND AVERAGE GROSS INCOME PER FARM, WITH PER CENT OF GROSS INCOME ON TOTAL INVESTMENT IN FARM PROPERTY, CLASSIFIED BY PRINCIPAL SOURCE OF INCOME.

	AVF	AVERAGE VALUES PER FARM OF-						
ĺ	Farm	property	1900.	Gross	Per cent of gross income			
PRINCIPAL SOURCE OF INCOME.	Land and im- prove- ments (except build- ings).	Build- ings.	Imple- ments and ma- chinery.	Live stock,	income (products of 1899 not fed to live stock).	on total invest- ment in farm property		
The State	\$7 55	\$244	\$48	\$274	8397	80.0		
Hay and grain Vegetables Fruits Live stock Dairy produce. Tobacco Cotton Rice Sugar Flowers and plants Nursery products. Miscellaneous	570 893 8, 240 681 744 2, 879 845 659 1, 086 2, 557 5, 937 526	194 291 662 250 369 2,168 101 205 202 897 1,889 206	85 59 59 48 52 965 38 39 70 186 204 44	107 192 207 771 404 859 147 158 219 51 171 222	195 525 536 409 802 1,581 356 242 2,049 4,557 855	21, 5 37, 3 12, 9 28, 2 27, 0 50, 7 22, 7 22, 7 25, 6 85, 6		

With the exception of nurseries, which are few in number, fruit farms show the highest value of land and improvements per farm. They occupy but 5.4 per cent of the total farm area, but constitute 21.3 per cent of the total value of farm property. The percentage of gross income on total investment in farm property, however, is much lower for fruit farms than for the farms of any other group. This is due to the fact that a large number of newly planted orchards having high valuations, but which yielded little or no income in 1899, were classed as fruit farms, thus materially reducing the average gross income per farm for the group.

For the several classes of farms the average values per acre of the products not fed to live stock are: Flowers and plants, \$168.84; nursery products, \$59.27; vegetables, \$6.76; fruit, \$6.30; tobacco, \$6.05; sugar, \$8.90; cotton, \$3.39; dairy produce, \$3.66; live stock, \$3.10; miscellaneous, \$2.98; and hay and grain, \$1.75.

The wide variations shown in the averages and percentages of gross income are largely due to the fact that in computing gross income no deductions are made for expenses involved in operation. For florists' establishments, nurseries, and market gardens, the average expenditure for such items as labor and fertilizers represents a far larger percentage of the gross income than in the case of "hay and grain," "live-stock," or "miscellaneous" farms. If it were possible to present the average net income, the variations shown would be comparatively slight.

FARMS CLASSIFIED BY REPORTED VALUE OF PRODUCTS NOT FED TO LIVE STOCK.

Tables 12 and 13 present data relating to farms classified by the reported value of products not fed to live stock.

TABLE 12.—NUMBER AND AOREAGE OF FARMS, AND VALUE OF FARM PROPERTY, JUNE 1, 1900, CLASSIFIED BY REPORTED VALUE OF PRODUCTS NOT FED TO LIVE STOCK, WITH PERCENTAGES.

VALUE OF PRODUCTS	Num-	NUMBER OF ACRES IN FARMS.			VALUE OF FARM PROPERTY.		
NOT FED TO LIVE STOCK.	ber of farms.	Average.	Total.	Per cent.	Total.	Per cent.	
The State	40,814	106.9	4, 363, 891	100.0	\$53, 929, 064	100.0	
\$0	989 2, 698 4, 171 12, 920 11, 616 6, 031 1, 966 425	62.5 47.5 52.6 71.0 101.2 168.2 286.7 667.9	61, 789 128, 185 219, 463 917, 470 1, 176, 290 1, 014, 162 563, 704 283, 878	1. 4 8. 0 5. 0 21. 0 26. 9 23. 3 12. 9 6. 5	1, 572, 840 1, 915, 250 2, 544, 180 9, 077, 880 12, 144, 440 11, 707, 426 8, 412, 700 6, 554, 348	2.9 3.6 4.7 16.8 22.5 21.7 15.6 12.2	

TABLE 13.—AVERAGE VALUES OF SPECIFIED CLASSES OF FARM PROPERTY, AND AVERAGE GROSS INCOME PER FARM, WITH PER CENT OF GROSS INCOME ON TOTAL INVESTMENT IN FARM PROPERTY, CLASSIFIED BY REPORTED VALUE OF PRODUCTS NOT FED TO LIVE STOCK.

	IVA					
VALUE OF PRODUCTS NOT FED TO LIVE STOCK.	Farm	property	Gross	Per cent of gross income		
	Land and im- prove- ments (except build- ings).	Build- ings.	Imple- ments and ma- chinery.	Live stock,	income (products of 1899 not fed to live stock).	on total
The State	8 755	\$244	\$ 48	\$ 274	\$ 397	30.0
\$0. \$1 to \$49. \$50 to \$99 \$100 to \$249 \$250 to \$499 \$300 to \$999 \$1,000 to \$2,499 \$2,600 and over	1.066	382 146 186 148 213 346 687 2,257	23 17 21 26 89 72 133 754	69 71 81 197 285 457 944 8,412	27 78 175 857 685 1,445 5,684	8.9 12.7 24.9 84.1 35.3 38.8 86.9

Nearly all of the 989 farms reporting no income in 1899 were fruit farms which had been partially abandoned or on which the trees were too young to bear. The high average values of the land and buildings of these farms indicate that some of them were country homes or estates held for pleasure and not for profit. For some of them it was impossible to secure complete reports, as changes in ownership or tenancy had occurred shortly prior to enumeration, and the persons in charge June 1, 1900, could not give definite information concerning the products of the preceding year. The same statements are true concerning some of the farms which reported incomes of less than \$100. To this extent the reports fall short of giving a complete exhibit of farm income in 1899.

LIVE STOCK.

At the request of the various live-stock associations of the country, a new classification of domestic animals was adopted for the Twelfth Census. The age grouping for neat cattle was determined by their present and prospective relations to the dairy industry and to the supply of meat products. Horses and mules are classified by age, and

neat cattle and sheep by age and sex. The new classification permits a very close comparison with the figures published in previous census reports.

Table 14 presents a summary of live-stock statistics.

TABLE 14.—NUMBER OF DOMESTIC ANIMALS, FOWLS, AND BEES ON FARMS, JUNE 1, 1900, WITH TOTAL AND AVERAGE VALUES, AND NUMBER OF DOMESTIC ANIMALS NOT ON FARMS.

			ON FARMS.		NOT ON FARMS.
LIVE STOCK.	Age in years.	Number.	Value.	Average value.	Num- ber.
Calves Steers Steers Steers Bulls Heifers Cows kept for milk Cots kept for milk Colts Horses Horses Mules Asses and burros Lambs Sheep (ewes) Sheep (rams and wethers) Swine Goats Trokeys Geese Ducks Bees (swarms of)	All ages	138, 393 67, 292 46, 781 44, 516 19, 342 70, 445 78, 880 285, 712 2, 289 2, 185 88, 387 102 2, 185 65, 881 46, 528 464, 277 48, 705 1, 107, 816 82, 869 86, 877	\$586, 919 405, 590 404, 300 556, 813 198, 998 458, 458 1, 046, 849 2, 684, 922 42, 156 75, 282 2, 172, 751 22, 102 1, 049, 558 3, 445 32, 483 109, 186 97, 692 702, 827 32, 639 } 394, 557	34, 48 56, 60 32, 47 58, 68 79, 60 35, 15 1, 49 1, 95 2, 09 1, 51 0, 75	8, 186 798 532 1, 257 172 9, 444 1, 996 86 66 7, 448 4 15 3, 239 198 950 368 15, 622 1, 848
Value of all live stock			88, 827 11, 166, 016	2,11	

¹ The number reported is of fowls over 3 months old. The value is of all, old and young.

² h:cluding Guinea fowls.

The total value of all live stock on farms, June 1, 1900, was \$11,166,016. Of this amount 9.4 per cent represents the value of dairy cows; 47.4 per cent, that of other neat cattle; 20.5 per cent, that of horses; 9.6 per cent, that of mules; 6.3 per cent, that of swine; 2.2 per cent, that of sheep; and 4.6 per cent that of all other live stock.

No reports were secured concerning the value of live stock not on farms, but it is probable that such animals have higher average values than those on farms. Allowing the same averages, however, the total value of all live stock in the state, exclusive of the poultry and bees not on farms, would be \$12,015,700.

CHANGES IN LIVE STOCK ON FARMS.

The following table shows the changes since 1850 in the number of the most important domestic animals.

Table 15.—NUMBER OF SPECIFIED DOMESTIC ANIMALS ON FARMS: 1850 TO 1900.

YEAR.	Dairy cows.	Other neat cattle.	Horses.	Mules and asses.	Sheep.1	Swine.
1900	78, 830	672, 481	42, 811	13, 762	102, 709	464, 277
	113, 388	370, 176	81, 807	9, 755	98, 276	874, 241
	42, 174	425, 196	22, 636	9, 606	56, 681	287, 051
	61, 922	928, 993	11, 902	8, 835	26, 599	158, 908
	92, 974	295, 086	13, 446	10, 910	30, 158	271, 742
	72, 876	188, 209	10, 848	5, 002	23, 811	209, 458

¹ Lambs not included.

The number of dairy cows shown in the table for 1900 is 30.5 per cent less than for 1890. It is probable, however, that this decrease is more apparent than real, and that many of the 285,712 "cows and heifers, 2 and over, not kept for milk," were milch cows dry at the time of enumeration or were excluded by a stricter definition of the term "dairy cow" than was used by previous censuses. Many of them were doubtless milked for a part of the year, although not kept primarily for milk. The increase of 90.6 per cent in the production of milk sustains this view.

The number of other neat cattle given for 1900 includes 138,393 calves. It is uncertain whether or not calves were included in previous reports. If not, they should be deducted from the 1900 figures before making comparisons with the reports of previous censuses. Even if this is done an increase would still be shown for the last decade, indicating a marked development of the live-stock industry in recent years.

The remaining classes of live stock reported in the table show steady increases since 1850, except for the Civil War period. The rates of increase since 1890 are as follows: Mules and asses, 41.1 per cent; horses, 84.6 per cent; swine, 24.1 per cent; and sheep, 4.5 per cent.

In comparing the poultry report for 1900 (see Table 14) with that for 1890, it should be borne in mind that in 1900 the enumerators were instructed not to report fowls less than three months old, while in 1890 no such limitation was made. This fact explains the decreases shown in the number of all kinds of fowls except chickens, and the small increase shown for those fowls. Compared with the figures for 1890, the present census shows decreases in the number of fowls as follows: Turkeys, 4.5 per cent; ducks, 27.5 per cent; geese, 2.3 per cent. The number of chickens increased 20.5 per cent.

ANIMAL PRODUCTS.

Table 16 is a summarized exhibit of the products of the animal industry.

TABLE 16.—QUANTITIES AND VALUES OF SPECIFIED ANIMAL PRODUCTS, AND VALUES OF POULTRY RAISED, ANIMALS SOLD, AND ANIMALS SLAUGHTERED ON FARMS IN 1899.

PRODUCTS.	Unit of measure.	Quantity.	Value.
Wool Mohair and goat hair Milk Butter Cheese Eggs Poultry Honey Wax Animals sold Animals slaughtered	Pounds Dozens Pounds Pounds	383,898 20 19,840,484 1,886,445 3,751 4,214,186 677,540 82,290	\$66, 881 8 1, 468, 608 558, 524 574, 703 58, 500 830, 657 1, 257, 648
Total			4,810,524

¹ Includes all milk produced.

The animal products of the state were valued at \$4,810,524, or 26.3 per cent of the value of all farm products, and 29.7 per cent of the gross farm income. Of the above amount, 43.4 per cent represents the value of animals sold and of animals slaughtered on farms; 30.5 per cent, that of dairy products; 23.5 per cent, that of poultry and eggs; and 2.6 per cent, that of wool, mohair, honey, and wax.

DAIRY PRODUCTS.

The quantity of milk produced increased 90.6 per cent in the last decade; that of butter, 59.9 per cent; and that of cheese, 116.7 per cent.

Of the \$1,468,603, given in Table 16, as the value of all dairy products in 1899, \$1,121,787, or 76.4 per cent, represents the value of such products consumed on the farms of the producers, and \$346,816, or 23.6 per cent, the amount realized from sales. Of the latter sum, \$262,670 was derived from the sale of 1,003,918 gallons of milk; \$1,497, from 1,427 gallons of cream; \$82,890, from 339,503 pounds of butter; and \$259 from 2,912 pounds of cheese.

POULTRY AND EGGS.

Of the total value of the products of the poultry business in 1899, 50.9 per cent represents the value of fowls raised, and 49.1 per cent, that of eggs produced. The number of dozens of eggs reported in 1900 was 51.1 per cent greater than that reported in 1890.

WOOL.

With the exception of the ten years from 1860 to 1870, the production of wool has increased with each decade for half a century. The gain for the last decade was 50.4 per cent. The Tenth Census, which was the first to report the number of fleeces shorn, showed 56,681, having a total weight of 162,810 pounds. In 1899 the number of fleeces shorn was 109,821, and the aggregate weight, 333,898 pounds. The average weight of fleeces was practically the same in 1879 and 1899, being approximately 3 pounds. Wool was reported in all counties except Brevard, Dade, and Lee.

HONEY AND WAX.

The quantity of honey reported in 1900 exceeded that reported in 1890 by 114,554 pounds, or 20.8 per cent. The amount of wax produced increased 19.2 per cent.

HORSES AND DAIRY COWS ON SPECIFIED CLASSES OF FARMS.

Table 17 presents, for the leading groups of farms, the number of farms reporting horses and dairy cows, the total number for each group, and the average number per farm. In computing the averages presented, only those farms which report the kind of stock under consideration are included.

TABLE 17 .- HORSES AND DAIRY COWS ON SPECIFIED CLASSES OF FARMS, JUNE 1, 1900.

		Horses.		DAIRY COWS.		
olasses.	Farins report- ing.	Num- ber.	Average per farm,	Farms report- iug.	Num- ber.	Average per farm,
Total	26, 972	42,811	1.6	21, 104	78, 83D	8.7
White farmersColored furmers	19,536 7,436	32, 858 9, 953	1.7 1.3	15, 987 5, 117	67, 031 11, 7 9 9	4.2 2.3
Owners 1 Managers Cash tenants Share tenants	21,004 380 4,136 1,452	34, 833 724 5, 306 1, 948	1, 7 1, 9 1, 8 1, 8	16, 964 263 3, 015 862	64,555 1,912 8,102 4,261	8.8 7.3 2.7 4.9
Under 20 acres 20 to 99 acres 100 to 174 acres 175 to 259 acres 260 acres and over	2, 956 14, 101 5, 957 1, 767 2, 191	8, 809 19, 929 9, 985 3, 586 5, 412	1.3 1.4 1.7 2.0 2.5	2, 114 10, 207 4, 966 1, 637 2, 185	8, 251 81, 145 15, 127 7, 995 16, 312	3.9 8.1 3.0 4.9 7.5
Hay and grain Vegetable Fruit Live stook Dairy Tobacco Cotton Rice Sugar Florist Kursery Miscellaneous	1,413 4,002 1,377 124 5,251 47 41 5	1, 192 4, 690 2, 217 7, 643 2, 373 267 7, 413 64 71 6 17 16, 868	1.8 1.6 1.9 1.9 1.7 2.4 1.4 1.7 1.4 1.6	397 1,765 780 8,023 1,863 105 3,567 18 27 4 11 9,554	1,132 4,349 2,881 14,402 15,910 9,518 9,518 95 95 82 80,685	2.9 2.5 3.1 4.8 8.9 2.7 3.2 2.9 2.9 8.9

1 Including "part owners" and "owners and tenants."

CROPS.

The following table gives statistics concerning the principal crops grown in 1899.

TABLE 18.-ACREAGES, QUANTITIES, AND VALUES OF THE PRINCIPAL FARM CROPS IN 1899.

Corn	
Wheat 85 Bushels 800 Oats 31,467 Bushels 297,430 Barley 27 Bushels 227,430 Rye 764 Bushels 30 Buckwheat 2 Bushels 30 Rice 5,410 Bushels 37 Grass seel 21,994 Tons 37,187 Hay and forage 21,994 Tons 37,187 Cotton (upland) 99,038 Hales 1 30,283 Cottonseed (upland) 70ns 14,702 10ns 12,211 Broom corn 34 70ns 12,211 10ns 12,211 Broom corn 9,189 100nds 1,25,600 12,660 12,660 Dry beans 17,876 Bushels 159,814 18,814 18,814 18,814 18,814 18,814 18,814 18,763 18,814 18,814 18,763 18,814 18,814 18,763 18,814 18,814 18,763 18,814 18,814	alue.
Wheat 85 Bushels 800 Oats 31,467 Bushels 297,430 Barley 27 Bushels 227,430 Rye 764 Bushels 30 Buckwheat 2 Bushels 30 Rice 5,410 Bushels 37 Grass seel 21,994 Tons 37,187 Hay and forage 21,994 Tons 37,187 Cotton (upland) 99,038 Hales 1 30,283 Cottonseed (upland) 70ns 14,702 10ns 12,211 Broom corn 34 70ns 12,211 10ns 12,211 Broom corn 9,189 100nds 1,25,600 12,660 12,660 Dry beans 17,876 Bushels 159,814 18,814 18,814 18,814 18,814 18,814 18,814 18,763 18,814 18,814 18,763 18,814 18,814 18,763 18,814 18,814 18,763 18,814 18,814	669,609
Oats 31, 467 Bushels 297, 330 Burley Rye 764 Bushels 820 Rye 764 Bushels 4,840 Bushels 30 Rhoe 4,840 Bushels 30 Rhoe 2,254,492 Bushels 37 Tons 37,187 Cotton (upland) 99,038 Bales 30,283 Cotton (ten island) 122,793 Bales 31,573 1 Cottonseed (sea island) 34 Tons 12,211 Pounds 3,390 Tobacco 2,066 Dry beans 9,189 Bushels 176,560 Dry pease 17,576 Bushels 159,814 Peanuts 69,482 Bushels 967,927 Potatoes 8,751 Bushels 292,212 Bweet potatoes 22,741 Bushels 2,049,784 Ontons 159 Bushels 2,049,784 Ontons 159 Bushels 2,049,784	601
Barley	143,028
Rye. 764 Bushels. 4,840 Buckwheat 2 Bushels. 30 Rice 5,410 Bushels. 37 Hay and forage 21,994 Bushels. 37,187 Cotton (upland) 99,0.38 Bales! 30,288 Cottonseed (upland) 122,793 Bales! 31,573 1 Cottonseed (sea island) 70ns. 12,192 12,793 1 Cottonseed (sea island) 70ns. 12,211 1 Promatos 2,066 10ns. 1,126,600 1 Dry pease 17,876 10nshels. 159,814 1 Pennuts 66,462 10nshels. 1967,927 1 Potatoes 8,762 10nshels. 202,212 202,212 1 Sweet potatoes 22,711 10nlons 10s 10s 18,768 Cassava 755 15 15 15,768 18,768	318
Buckwheat 2	5, 514
Bushels 37 Hay and forage 21,994 37,187 Cotton (upland) 99,048 Bales 30,283 Cotton (teal island) 122,793 Bales 30,283 Bales 31,573 1 Cottonseed (upland) Tons 14,702 Tons 12,211 Founds 3,390 Tonscoon corn 34 Tonscoon 2,066 Dry beans 9,189 Pounds 1,126,600 Bushels 176,304 Bushels 176,304 Bushels 159,814 Bushels 10,497 Bushels 10,497 Bushels 20,49,784 Bushels 20,	80
Hay and forage	87, 332
Cotton (upland) 99,0.38 Bales¹ 30,288 Bales¹ 31,573 1 Cotton (en island) 122,793 Tons 14,702 Tons 14,702 Tons 12,211 Bales¹ 12,211 Bales² 12,221 Bales² 12,211 Bales² 12,221 Bales² 12,211 Bales² 12,221 Bales² 12,221 Bales² <	87
Cotton (sea island)	485, 297
Cottonseed (upland) Tons 14,702 Cottonseed (sea island) Tons 12,211 Broom corn 34 Pounds 1,26,600 Tops common 9,189 Pounds 1,126,600 Dry peans 17,575 Bushels 176,804 Pounts 60,482 Bushels 159,814 Potatoes 8,761 Bushels 292,212 Sweet potatoes 22,741 Bushels 2,043,784 Onions 159 Bushels 18,763 Cassava 755 Bushels 18,768	926, 558
Cottonseed (sea island) Tons 12,211 Broom cott: 34 Pounds 3,390 Tobacco 2,066 Pounds 1,126,600 Dry beans 9,189 Pushels 176,304 Dry pense 17,876 Hushels 159,814 Pcanuts 69,452 Bushels 967,927 Potatoes 8,752 Bushels 222,711 Sweet potatoes 22,741 Bushels 2,049,784 Onions 159 Bushels 2,049,784 Cassava 755 Bushels 18,768	, 665, 238
Broom corn 34 Pounds 3,330 Pounds 1,126,600 Pounds 1,126,800 Pounds 1,126	158,860
Tobacco 2,056 Pounds 1,126,600 Dry benns 9,189 Rushels 176,304 Dry pense 17,575 Bushels 159,814 Peanuts 60,482 Bushels 967,927 Potatoes 8,752 Bushels 282,212 Sweet potatoes 22,771 Bushels 2,08,784 Onions 159 Bushels 18,783 Cassava 755 18,783	149, 774
Dry beans 9,189 Rushels 176,304 Dry pense 17,876 Bushels 159,814 Peanuts 60,452 Bushels 967,927 Potatoes 8,751 Rushels 282,212 Sweet pointoes 22,741 Bushels 2,049,784 Onions 755 Bushels 18,768 Cassava 755 Bushels 18,768	174 254, 211
Dry pense 17,876 Bushels 159,814 Peanuts 69,452 Bushels 967,927 Potatoes 8,761 Rushels 282,212 Sweet potatoes 22,741 Bushels 2,049,784 Onions 159 Bushels 18,783 Cassava 755 Bushels 18,788	139, 849
Pennuts 60,482 Bushels 967,927 Potatoes 8,752 Bushels 282,212 Sweet potatoes 22,741 Bushels 2,948,784 Onions 150 Bushels 2,048,784 Cassava 755 Bushels 18,788	171,702
Potatoes 8,752 Rushels 282,212 Sweet potatoes 22,741 Bushels 2,048,784 Onions 159 Bushels 18,788 Cassava 755 18,788	699, 719
Sweet potatoes 22, 761 Bushels 2, 049, 784 Onions 150 Bushels 18, 788 Cassava 755	187, 274
Onions 150 Bushels 18,798 Cassava 755	898, 282
Gassava 755	18, 827
G	22, 569
Cassava seed	1,729
Miscellaneous vegetables 25, 848	, 911, 63
Sugar cane 12,800 Tons 21,157	5,19
Sugar cane kept for seed Tons 55, 200	193, 200
SugarPounds 284,300	12, 74
Sirup Gallons 1,687,452	512, 03
Small fruits 1.343 Quarts 1.770.980	189,86
	56, 42
Orchard fruits 228, 458 Bushels 228, 458	⁵ 192, 89
Tropical fruits \$39,014	945,60
Nuts Porcet products	8,45
Forest products Flowers and plants Agende	648, 41
Seeds 21	41, 41
Seeds 22 Nursery products 693 Miscallaneous	8, 62 122, 14
Miscellaneous	24, 47
	29,40
Total 1,059,515	100 E0
1, 000, 010	3, 498, 58

Of the total value of crops, vegetables, including potatoes, sweet potatoes, and onions, contributed 22.8 per

cent; cereals, 21.5 per cent; cotton, 21.5 per cent; fruits and nuts, 10.8 per cent; peanuts, 5.2 per cent; forest products, 4.8 per cent; sugar cane and its products, 5.4 per cent; hay and forage, 3.2 per cent; tobacco, 1.9 per cent; and all other products, 3.9 per cent.

The average gross values per acre of the various crops are as follows: Tobacco, \$123.64; vegetables, \$57.89; sugar cane and its products, \$56.50; fruits and nuts, \$32.45; hay and forage, \$19.79; cotton, \$13.05; peanuts, \$10.07; cereals, \$4.79.

VEGETABLES.

The value of all vegetables grown in the state in 1899, including potatoes, sweet potatoes, and onions, was \$3,016,067, which amount constitutes 16.5 per cent of the total value of farm products. Of the total value of vegetables, 29.8 per cent represents the value of sweet potatoes, and 6.2 per cent that of Irish potatoes. The largest quantities of sweet potatoes were raised in Alachua, Marion, and Leon counties, which reported 24.9 per cent of the total acreage. Since 1889 a gain of 17.2 per cent is shown in the production of sweet potatoes, and of 213.4 per cent in the production of Irish potatoes.

Aside from the land devoted to potatoes, sweet potatoes, and onions, 25,848 acres were used in the growing of miscellaneous vegetables. The products of 4,933 acres of this area were not reported in detail. Of the remaining area, 8,728 acres were devoted to watermelons; 4,401, to tomatoes; 2,437, to beans; 2,087, to muskmelons; 1,103, to cucumbers; 981, to cabbage; 548, to lettuce; and 680, to other vegetables.

CEREALS.

The following table is an exhibit of the changes in cereal production since 1849.

TABLE 19.—ACREAGE AND PRODUCTION OF CEREALS: 1849 TO 1899.

PART 1.-ACREAGE,

YRAR.1	Barley.	Corn.	Onts.	Rice.	Rye.	Wheat.
1899	27	569, 567	81, 467	5,410	764	85
1889	9	878, 906	42, 003	1,787	858	32
1879	21	860, 294	47, 962	2,551	501	81

1 No statistics of acreage were secured prior to 1879.

PART 2.-BUSHELS PRODUCED.

1899	820	5,311,050	297,430	2,254,492	4,840	800
1889	128	3,701,264	891,821	1,011,805	13,389	290
1879	210	8,174,294	468, 112	1,294,677	2, 965	2,808
1869	12	2,225,056	114, 204	401,687	545	
1859	8,369	2,884,891	46, 899	223,704	21, 306	
1849		1, 996, 809	86,586	1, 075, 090	1,152	1,027

2 Rice reported in pounds.

In 1899 the total area devoted to cereals, including rice, was 607,322 acres; in 1889 it was 423,590 acres; and in 1879, 411,510 acres. The gain in twenty years amounts to 47.6 per cent, of which 30.3 per cent took place in the last decade.

The principal cereal grown is corn, and each decade shows an increased acreage, the gain for the last decade amounting to 50.8 per cent. In 1900 the extreme northern

¹ Commercial bales.
2 Sold as cane.
2 Estimated from the number of vines or trees.
4 Including value of vine, raisins, etc.
5 Including value of cider, vinegar, etc.

counties—Columbia, Hamilton, Madison, Jefferson, Leon, Gadsden, and Jackson—reported 51.3 per cent of the acreage and 51.9 per cent of the product of that crop for the state.

Of the total acreage in oats, 56.0 per cent was reported by Madison, Marion, Leon, Columbia, Alachua, and Jackson counties, each having over 2,000 acres and ranking in the order named. A decrease of 25.1 per cent is shown for the state.

All counties except Dade and Monroe reported rice in 1899. The largest acreage was in Hillsboro county, which reported 502 acres with a yield of 455,542 pounds. Marion county reported the next largest area, 492 acres, with a yield of 168,298 pounds.

In addition to the cereals shown in Table 19, 2 acres of buckwheat, with a product of 30 bushels, were reported.

COTTON.

Table 20 is an exhibit of the changes in cotton production since 1849.

TABLE 20.—ACREAGE AND PRODUCTION OF COTTON: 1849 TO 1899.

	ACREAGE.		PRODUCTION.			
YEAR.1	Total.	Per cent of decrease.	Com- mercial bales.	Pounds.	Per cent of increase.	
1899 1869 1879 1879 1869 1859	221,829 227,870 245,595	2. 4 7. 4	61, 856 57, 928 54, 997 39, 789 65, 153 45, 131	26, 996, 884 27, 681, 656 24, 918, 641 17, 268, 426 28, 998, 085 18, 062, 400	22.8 10.9 44.3 240.4 60.6	

¹ No statistics of acreage were secured prior to 1880. ² Decrease.

The total area devoted to the cultivation of cotton in 1899 was 221,829 acres. The total production was 61,856 commercial bales, or 26,996,884 pounds, an average of 0.279 bale or 121.7 pounds per acre. In 1889 the total area was 227,370 acres, and the total product was 57,928 commercial bales, or 27,631,656 pounds, an average of 0.255 bale or 121.5 pounds per acre. There were decreases of 2.4 per cent and 2.3 per cent, respectively, in the last decade in acreage and production. For the decade from 1880 to 1890, there was an increase of 10.9 per cent in production, although the acreage decreased 7.4 per cent.

Of the total acreage in 1899, 99,036 acres, or 44.6 per cent, were devoted to the cultivation of upland cotton, while 122,798 acres, or 55.4 per cent, were used for seaisland cotton. Of the total product, upland cotton comprised 30,283 bales, or 14,940,617 pounds, and sea-island cotton, 31,573 bales or 12,056,267 pounds.

No cotton whatever was reported by any county lying wholly south of the twenty-eighth parallel, and only 65 bales were grown in counties lying south of the twenty-ninth parallel. The eight counties of Jackson, Jefferson, Leon, Madison, Columbia, Alachua, Suwanee, and Hamilton reported 82.9 per cent of the total acreage and 82.6 per cent of the total number of bales produced in the state. The largest area in cotton for any single county—29,508

acres—was reported by Jackson county. In 1889 this county reported 25,272 acres. In 1889 Jefferson county had the largest area, 80,356 acres, while in 1899 the area grown was 27,761 acres, a loss for the decade of 8.5 per cent.

The total value of the cotton produced represents 17.9 per cent of the gross farm income. Of the total number of acres of improved land in the state, 14.7 per cent were used in the cultivation of cotton.

SUGAR CANE AND ITS PRODUCTS.

Table 21 presents a comparative exhibit of the acreage of cane and the production of sugar and sirup, 1840 to 1899.

TABLE 21.—ACREAGE OF CANE, AND PRODUCTION OF SUGAR AND SIRUP: 1849 TO 1899.

		SUGA	ıR,	eiro	IP.
YEAR.1	Acreage in cane.	Produc- tion in pounds.	Average yield per aore in pounds.	Produc- tion in gallons,	Average yield per acre in gallons.
1899 1889 1879 1879 1869 1869	12,890 9,845 7,988	254, 300 1, 692, 015 1, 527, 600 1, 142, 400 2, 002, 800 8, 800, 000	22, 2 181, 1 192, 4	1,687,452 1,441,744 1,029,868 844,839 436,857	181. 8 154. 8 129. 7

¹ No statistics of acreage were secured prior to 1879.

In comparing the sugar statistics of 1900 with those of previous censuses it should be considered that about 60.0 per cent of the crop of 1899 was destroyed by frost. The area devoted to sugar cane increased from 9,845 acres in 1889 to 12,800 acres in 1899, a gain for the decade of 37.0 per cent. Accepting the estimate of a 60.0 per cent loss as approximately correct, a normal year would have given to Florida a total of 710,750 pounds of sugar and 4,218,630 gallons of sirup as a product for the acreage reported.

Each decade shows an increase in the quantity of sirup manufactured, while the production of sugar is rapidly declining, indicating that the planters find sirup the more profitable product. The manufacture of sugar and sirup in Florida is carried on entirely by the "open-kettle" process. The sirup produced by this method is of superior quality and commands a good price, while the sugar is of the brown variety and is rated low commercially.

The largest production of sugar, 25,300 pounds, was reported by Duval county, and the largest quantity of sirup, 166,956 gallons, was made in Gadsden county. The latter county also leads in total value of product, the value reported in 1900 being \$48,264. Alachua county ranks second with a production of 112,945 gallons of sirup, valued at \$36,066. The total value of the sugar and sirup produced in the state represents 3.2 per cent of the gross farm income.

SEMITROPICAL FRUITS.

The changes in production of semitropical fruits since.

1889 are shown in the following table.

TABLE 22.—SEMITROPICAL TREES AND FRUITS: 1890 AND 1900.

	NUMBER OF TREES.		QUANTITIES OF FRUIT.			
frui t.	1900.	1890.	Unit of measure.	1899.	1889.	
Figs	9, 438 106, 025 3, 271 22, 691 41, 741 2, 552, 542 214,578,597 117, 836 8, 186 34, 781	20, 109 21, 448 38, 729 85, 052 17, 089 2, 725, 272 221,605,000 8, 135	PoundsPoundsPoundsBoxesBoxesBoxesPoundsPoundsPounds	66, 680 1, 645, 795 75, 110 2, 359 22, 714 273, 295 2, 863, 140 12, 306 250 112, 670	(1) (1) (1) (252, 948 46, 294 8, 146, 740 10, 452, 490 \$10, 080	

No product reported in 1890. 2 Plants.

The value of semitropical fruits grown in Florida in 1889 was \$5,930,787. For 1899 the corresponding value was \$945,607, a loss in ten years of 84.1 per cent. The cold wave of the winter of 1894-95, and the severe frost in February of 1899, resulted in the destruction of about three-quarters of the orange trees of the state. The orange groves of Columbia, Bradford, and St. John counties were almost entirely destroyed, and the counties of Alachua, Marion, Putnam, and Sumter lost about nine-tenths of their trees. In this region, Lake was the only county that escaped with as small a loss as 40.0 per cent of its groves. Although much farther south, the losses in Polk county amounted to about 70.0 per cent, and the gulf counties. Levy, Citrus, Hernando, and Pasco, lost about 90.0 per cent of their trees. Baker, Dade, Lafayette, Lee, Manatee, and Monroe counties each show a slight increase since 1889 in the number of orange trees.

In 1889 the four counties of De Soto, Hillsboro, Lee, and Manatee comprised but 6.3 per cent of the orangegrowing area of the state, and their production was commercially insignificant. In 1899 these four counties contained 20.9 per cent of all the orange trees, and produced 245,454 boxes of oranges or 89.8 per cent of the total production for the state.

The pineapple industry still centers in Brevard and Dade counties as it did in the preceding census year, 81.1 per cent of the entire number of plants grown in the state in 1899 being reported by these two counties. Since 1890 there has been an increase in the number of plants amounting to 55.3 per cent in Brevard county, and to 61.4 per cent in Dade county. A decrease is shown in the total number of plants, however, owing to the exaggerated number reported from Monroe county in 1890.

Olive trees are grown in Florida for ornamental or experimental purposes only. The 250 pounds of olives shown in the tables were reported by two farmers in Osceola county. In addition to the trees shown in Table 22, unclassified semitropical fruit trees to the number of 84,731 were reported, with a yield of 112,670 pounds of

ORCHARD FRUITS.

The following table shows the changes in orchard fruits since 1890.

TABLE 23.—OROHARD TREES AND FRUITS: 1899 AND 1900.

	NUMBER (F TREES.	BUSHELS OF FRUIT.		
fruits.	1900.	1890.	1899.	1889.	
Apples Apricots Cherries Penches Fears Plums and prunes	8, 219 524 1, 495 354, 208 208, 145 107, 720	7, 025 1, 448 838 235, 936 49, 295 86, 688	1,866 68 112 92,113 83,584 47,840	2,610 15 12 280,290 84,255 13,856	

Among temperate orchard fruits some interesting changes are to be noted. The entire number of trees has a little more than doubled within the past ten years, rising from about one-ninth of the number of orange trees in 1890 to more than one-fourth in 1900.

In this class peach trees are far the most important. They constituted about 71.0 per cent of all orchard trees in 1890, but only 50.2 per cent in 1900. This change is the result of the greater relative increases in other fruits, especially in pear and plum trees, which increased from 49,295 and 36,688, respectively, in 1890, to 208,145 and 107,720 in 1900, thus coming into the same general grade of importance with peach trees. Apples, cherries, and apricots are of minor importance. Increases were reported in the number of trees of all kinds, except apricots, as follows: Apples, 17.0 per cent; cherries, 348.9 per cent; peaches, 50.1 per cent; pears, 322.2 per cent; plums and prunes, 193.6 per cent. The rate of decrease in the number of apricot trees is 63.8 per cent.

The counties that report more than 10,000 peach trees each are Alachua, Clay, Duval, Escambia, Gadsden, Hillsboro, Jackson, Lake, Marion, Polk, Putnam, Santa Rosa, Taylor, and Walton, in the northern and central parts of the state. The large increases in the number of pear and plum trees indicate that farmers are realizing that the soil and climate of Florida are well adapted to the culture of these fruits. The largest number of pear trees, 16.3 per cent of the total number, was reported by Leon county. Marion county reported 13.5 per cent of all the plum and prune trees. Gadsden, Jackson, and Santa Rosa counties reported almost one-half of all the apple trees. In addition to the trees shown in Table 23, unclassified fruit trees to the number of 3,769 were reported, with a yield of 2,870 bushels of fruit.

The value of orchard products, given in Table 18, includes the value of 708 barrels of cider, 298 barrels of vinegar, and 4,870 pounds of dried and evaporated fruits.

SMALL FRUITS.

The total area used in the cultivation of small fruits in 1899 was 1,343 acres, distributed among 1,669 farms. The value of the fruits grown was \$189,867, an average of \$113.76 per farm reporting.

Of the total area in small fruits all but 30 acres were devoted to strawberries, the yield being 1,731,730 quarts. Bradford county, near the northern border of the state, and Hillsboro, Polk, and Pasco counties, in the east central portion, contained 74.3 per cent of the total acreage devoted to this fruit, and reported 75.6 per cent of the total

product. Of the remaining 30 acres, 5 were used for raspberries, and 25 for other small fruits.

TOBACCO.

Tobacco was grown for the market in Florida as early as 1840, and in the decade from 1850 to 1860 its culture became an important industry in certain sections of the state. The Florida "speckled-leaf," differing from the Connecticut "seed-leaf" or "broad-leaf" chiefly in its spotted appearance, was the principal variety grown. After 1860 the industry declined rapidly, and, largely on account of the competition of Sumatra tobacco and the difficulty in controlling labor, was soon practically abandoned.

Since 1885 the introduction of Cuban and Sumatran seed and careful experimentation have revived the industry. In 1889, 1,190 acres were devoted to the crop and 470,443 pounds of tobacco were gathered. In 1899, 998 farmers devoted 2,056 acres to tobacco and gathered a crop of 1,125,600 pounds. The acreage increased 72.8 per cent in the decade and the production more than doubled. Gadsden is the leading county in tobacco culture, having reported in 1900, 84.5 per cent of the total acreage and 90.8 per cent of the total product.

PEANUTS

In 1899, 967,927 bushels of peanuts, valued at \$699,713, were grown on 69,452 acres of land. In 1889, 359,555 bushels were obtained from 26,166 acres, the average yield per acre in both years being approximately 14 bushels. Jackson county had the largest acreage in both years, having reported in 1889, 3,224 acres and a yield of 29,050 bushels, and in 1899, 12,003 acres and a yield of 130,619 bushels. Suwanee county ranked second in 1899 in both acreage and production, having reported 5,779 acres and 90,519 bushels. Ten years before Alachua county ranked second and Suwanee county, sixth. In the present census Alachua county ranks third in acreage.

FLORICULTURE.

The total value of plants and flowers grown by the operators of the 44 farms from whom reports on this industry were received was \$41,417. Only 15 of the 44 were commercial florists, the others having raised flowers or plants incidentally in connection with their farming operations. In 1899 the income derived by these 15 establishments from the sale of flowers and plants was \$27,309, and that from other products was \$3,429. The total capital invested by them in land was \$38,350; in buildings, \$13,450; in implements, \$2,790; and in live stock, \$772.

Of the total area of 74,960 square feet of land under glass, reported by the operators of 31 farms, 59,962 square feet, equivalent to 79,950 square feet of glass surface, were used by the 15 commercial florists.

NURSERIES.

The 30 nurseries in the state yielded, in 1899, a gross income of \$136,726, of which \$118,622 was derived from the sale of trees, shrubs, and vines, and \$18,104 from other

products. The acreage reported by nurserymen was 2,307, making the average income per acre \$59.27.

LABOR AND FERTILIZERS.

The total expenditure for labor on farms in 1899, including the value of board furnished, was \$1,468,290, an average of \$36 per farm. The average was highest on the most intensively cultivated farms, being \$922 for nurseries, \$601 for florists' establishments, \$441 for tobacco farms, \$108 for fruit farms, \$81 for sugar plantations, \$58 for market gardens, \$27 for rice farms, and \$24 for cotton farms. Managers expended, on an average, \$290; owners, \$33; cash tenants, \$16; and share tenants, \$15. White farmers expended \$49 per farm, and colored farmers, \$10.

Fertilizers purchased in 1899 cost \$753,120, an average of \$18 per farm, and a decrease since 1890 of 12.2 per cent. The average expenditure was greatest for nurseries, and least for hay and grain farms. For nurseries the average was \$280; for tobacco farms, \$123; for florists' establishments, \$113; for fruit farms, \$68; for market gardens, \$45; and for cotton plantations, \$12.

IRRIGATION STATISTICS.

Irrigation occupies a position of growing importance in the agricultural economy of Florida. It is a comparatively recent innovation, having been first resorted to in 1888 by the orange growers. The results were apparently so satisfactory that the number of irrigators has increased from year to year.

Until the disastrous "freeze" of 1894-95, irrigation was confined almost entirely to orange groves, but with the destruction of thousands of orange trees, many of the irrigation systems were thrown out of use, and the attention of irrigators was turned to the industry of truck farming. In this industry the need of irrigation was quickly felt, as the products of truck farms are of large commercial value, and even a partial loss of crops is very costly. The cultivation of fruits and vegetables has proved most profitable, and the development of these branches of agriculture has been very rapid, giving a great impetus to the use of irrigation. At the present time by far the greater number of irrigation plants in the state are used by truck farmers and growers of small fruits.

Although it has a heavy mean annual rainfall, Florida is subject to severe droughts, especially during the growing period between February and June. In the sections where irrigation is reported, the soil is naturally nonretentive of moisture, and, owing to the great heat, evaporation is excessive.

The state appears to be underlaid by artesian waters at depths varying from 25 to 500 feet below the surface. Where these waters have been tapped the supply is found to be ample, many of the wells flowing with considerable pressure and great volume. In most cases no cost of pumping is entailed in irrigation, and the expense of maintaining the plant is very slight. The usual cost of one well, including drilling, casing, cement pipes, and everything required to complete a plant capable of irrigating 10 acres, is about \$500.

The system employed on the leading farms is as follows: Continuous underground cement pipes are laid from the wells to hydrants, plugs, or standpipes, from which the water is distributed in small furrows between rows. These pipes are made and laid at the same time by a machine, in trenches previously prepared, and extend without break to any desired part of the field. The pipe itself is composed of two parts sand and one part cement, with a usual inside measurement of 3 inches, and an outside measurement of θ inches, and costs about 10 cents per foot. In a few sections the water is pumped by windmills into tanks, whence it is distributed over the land through iron pipes or wooden troughs. Gasoline engines and rotary pumps are sometimes used instead of windmills. A well, with its equipment of gasoline engine, rotary pump, and iron pipe sufficient to irrigate 3 acres, costs about \$500. Using gasoline, at 14\frac{1}{2} cents per gallon, as a fuel, such a plant will deliver 2,000 gallons per hour, at an average cost of 4 cents per hour.

The most extensive irrigation systems in the state are located in Gadsden county, and belong to two companies engaged in the cultivation of Sumatra tobacco. The cost of constructing these plants, which irrigate 250 acres of tobacco, was \$36,250. In 1899 the value of the tobacco grown was \$91,000. The water for these plants is pumped by steam from several small creeks into reservoirs, from which it is distributed through ditches by gravity. One of the companies has perfected an elaborate plan of distribution through troughs and overhead sprays, the water being supplied in a manner very similar to that of natural rainfall.

Among the humid states where irrigation was practiced in 1899, in growing general crops, Florida ranked first in the area irrigated, in cost of plants, and in value of irrigated crops. In that year there were 180 irrigated farms, 166 of which reported irrigated products. On 14 farms 53 acres of nonbearing orange trees and pincapples were irrigated. Forty-three irrigation systems, representing an aggregate cost of \$78,525, and covering 751 acres, were not operated in 1899. The value of the products of the 1,485 acres irrigated was \$302,870, or an average of \$208.95 per acre. The total cost of the pumping systems, ditches, and wells was \$232,388, or an average of \$101.52 per acre. The following table presents statistics of irrigation for a number of the leading counties in the state.

IRRIGATION STATISTICS.

	Num- ber of farms ir- rigated.		Cost of systems.	IRRIGATED PRODUCTS.		
COUNTIES.				Acres.	Value.	Average value per acre,
The State	180	1,538	\$232,388	1,485	\$302,870	\$204
Alachua Breyard Dade De Soto Gadsden Hillsboro Leke Lee Manatee Orange Polk All other counties	15 4 6 57 18 5	84 111 57 62 252 80 21 82 666 56 42 75	7, 850 17, 800 13, 200 7, 060 36, 600 8, 775 10, 250 10, 300 42, 978 54, 315 5, 650 17, 615	84 108 57 62 252 75 21 76 641 58 42 69	10,876 6,730 652 6,388 91,176 14,999 640 10,378 107,602 15,611 4,850 32,978	820 65 11 108 862 200 30 186 168 295 115 478